OIPE

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 09/854864 — 0590 — 1011

CRF Processing Date: 10/29/01
Edited by: MM
Verified by:

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a formal error in the Current Application Data section, specifically: #7

- ☐ Edited the Current Application Data section with the actual current number. The number inputte applicant was ☐ the prior application data; or ☐ other _____.
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited wc
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. I applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingl due to a PatentIn bug). Sequences corrected: _____
- ☑ Other: ~~Edit~~ Examined Diskette Contents. CRF3 error — Reprocessed diskette contents — *Diskette contents did not match original sequence listing

ENTERED

ENTERED

*Examiner: The above corrections must be communicated to the applicant in the first O Action. DO NOT send a copy of this form.

#7

OIPE

RAW SEQUENCE LISTING DATE: 10/29/2001
PATENT APPLICATION: US/09/854,864 TIME: 10:07:13

Input Set : A:\PTO.MH.txt
Output Set: N:\CRF3\10292001\I854864.raw

3 <110> APPLICANT: THEILL, LARS EYDE
4 YU, GANG
6 <120> TITLE OF INVENTION: METHODS AND COMPOSITIONS OF MATTER CONCERNING APRIL/G70, BCMA,
7 BLYS/AGP-3, AND TACI
9 <130> FILE REFERENCE: A-686B
11 <140> CURRENT APPLICATION NUMBER: US 09/854,864
C--> 12 **<141> CURRENT FILING DATE: 2001-09-11**
14 <150> PRIOR APPLICATION NUMBER: US 60/204,039
15 <151> PRIOR FILING DATE: 2000-05-12
17 <150> PRIOR APPLICATION NUMBER: US 60/214,591
18 <151> PRIOR FILING DATE: 2000-06-27
20 <160> NUMBER OF SEQ ID NOS: 31
22 <170> SOFTWARE: PatentIn version 3.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 1465
26 <212> TYPE: DNA
27 <213> ORGANISM: Homo sapiens
29 <400> SEQUENCE: 1

ENTERED

30 gccaaccttc cctcccccaa ccctggggcc gccccagggt tcctgcgcac tgcctgttcc 60
32 tcctgggtgt cactggcagc cctgtccttc ctagagggac tggaacctaa ttctcctgag 120
34 gctgagggag ggtggagggt ctcaaggcaa cgctggcccc acgacggagt gccaggagca 180
36 ctaacagtac ccttagcttg ctttcctcct ccctcctttt tattttcaag ttcctttta 240
38 tttctccttg cgtaacaacc ttcttccctt ctgcaccact gcccgtaccc ttacccgccc 300
40 cgccacctcc ttgctacccc actcttgaaa ccacagctgt tggcagggtc cccagctcat 360
42 gccagcctca tctcctttct tgctagcccc caaagggcct ccaggcaaca tgggggccc 420
44 agtcagagag ccggcactct cagttgccct ctggttgagt tgggggcag ctctgggggc 480
46 cgtggcttgt gccatggctc tgctgaccca acaaacagag ctgcagagcc tcaggagaga 540
48 ggtgagccgg ctgcagggga caggaggccc ctcccagaat ggggaagggt atccctggca 600
50 gagtctcccg gagcagagtt ccgatgccct ggaagcctgg gagagtgggg agagatcccg 660
52 gaaaaggaga gcagtgctca cccaaaaaca gaagaagcag cactctgtcc tgcacctggt 720
54 tcccattaac gccacctcca aggatgactc cgatgtgaca gaggtgatgt ggcaaccagc 780
56 tcttaggcgt gggagaggcc tacaggccca aggatatggt gtccgaatcc aggatgctgg 840
58 agtttatctg ctgtatagcc aggtcctgtt tcaagacgtg actttcacca tgggtcaggt 900
60 ggtgtctcga gaaggccaag gaaggcagga gactctattc cgatgtataa gaagtatgcc 960
62 ctcccacccg gaccgggcct acaacagctg ctatagcgca ggtgtcttcc atttacacca 1020
64 aggggatatt ctgagtgtca taattccccg ggcaagggcg aaacttaacc tctctccaca 1080
66 tggaaccttc ctggggtttg tgaaactgtg attgtgttat aaaaagtggc tcccagcttg 1140
68 gaagaccagg gtgggtacat actggagaca gccaagagct gagtatataa aggagaggga 1200
70 atgtgcagga acagaggcgt cttcctgggt ttggctcccc gttcctcact tttccctttt 1260
72 cattcccacc ccctagactt tgattttacg gatatcttgc ttctgttccc catggagctc 1320
74 cgaattcttg cgtgtgtgta gatgaggggc gggggacggg cgccaggcat tgttcagacc 1380
76 tggtcggggc ccactggaag catccagaac agcaccacca tctaacggcc gctcgaggga 1440
78 agcacccggc ggtttgggcg aagtc 1465
81 <210> SEQ ID NO: 2
82 <211> LENGTH: 233
83 <212> TYPE: PRT
84 <213> ORGANISM: Homo sapiens

RAW SEQUENCE LISTING DATE: 10/29/2001
PATENT APPLICATION: US/09/854,864 TIME: 10:07:13

Input Set : A:\PTO.MH.txt
Output Set: N:\CRF3\10292001\I854864.raw

```
86 <400> SEQUENCE: 2
88 Met Gly Gly Pro Val Arg Glu Pro Ala Leu Ser Val Ala Leu Trp Leu
89 1               5                  10                  15
92 Ser Trp Gly Ala Ala Leu Gly Ala Val Ala Cys Ala Met Ala Leu Leu
93             20                  25                  30
96 Thr Gln Gln Thr Glu Leu Gln Ser Leu Arg Arg Glu Val Ser Arg Leu
97         35                  40                  45
100 Gln Gly Thr Gly Gly Pro Ser Gln Asn Gly Glu Gly Tyr Pro Trp Gln
101     50                  55                  60
104 Ser Leu Pro Glu Gln Ser Ser Asp Ala Leu Glu Ala Trp Glu Ser Gly
105 65                  70                  75                  80
108 Glu Arg Ser Arg Lys Arg Arg Ala Val Leu Thr Gln Lys Gln Lys Lys
109                 85                  90                  95
112 Gln His Ser Val Leu His Leu Val Pro Ile Asn Ala Thr Ser Lys Asp
113             100                 105                 110
116 Asp Ser Asp Val Thr Glu Val Met Trp Gln Pro Ala Leu Arg Arg Gly
117         115                 120                 125
120 Arg Gly Leu Gln Ala Gln Gly Tyr Gly Val Arg Ile Gln Asp Ala Gly
121     130                 135                 140
124 Val Tyr Leu Leu Tyr Ser Gln Val Leu Phe Gln Asp Val Thr Phe Thr
125 145                 150                 155                 160
128 Met Gly Gln Val Val Ser Arg Glu Gly Gln Gly Arg Gln Glu Thr Leu
129                 165                 170                 175
132 Phe Arg Cys Ile Arg Ser Met Pro Ser His Pro Asp Arg Ala Tyr Asn
133             180                 185                 190
136 Ser Cys Tyr Ser Ala Gly Val Phe His Leu His Gln Gly Asp Ile Leu
137         195                 200                 205
140 Ser Val Ile Ile Pro Arg Ala Arg Ala Lys Leu Asn Leu Ser Pro His
141     210                 215                 220
144 Gly Thr Phe Leu Gly Phe Val Lys Leu
145 225                 230
148 <210> SEQ ID NO: 3
149 <211> LENGTH: 1486
150 <212> TYPE: DNA
151 <213> ORGANISM: Mus musculus
153 <400> SEQUENCE: 3
154 catgccgagt gctttgtgtg tgttacctgc tctaagaagc tggctgggca gcgtttcacc     60
156 gctgtggagg accagtatta ctgcgtggat tgctacaaga actttgtggc caagaagtgt    120
158 gctggatgca agaaccccat cactgggttt ggtaaaggct ccagtgtggt ggcctatgaa    180
160 ggacaatcct ggcacgacta ctgcttccac tgcaaaaaat gctccgtgaa tctggccaac    240
162 aagcgctttg tatttcataa tgagcaggtg tattgccctg actgtgccaa aaagctgtaa    300
164 cttgacggct gccctgtcct tcctagataa tggcaccaaa ttctcctgag gctaggggag    360
166 aaggagtgtc agagtgtcac tagctcgacc ctggggacaa gggggactaa tagtacccta    420
168 gcttgatttc ttcctattct caagttcctt tttatttctc ccttgcgtaa cccgctcttc    480
170 ccttctgtgc ctttgcctgt attcccaccc tccctgctac ctcttggcca cctcacttct    540
172 gagaccacag ctgttggcag ggtccctagc tcatgccagc ctcatctcca ggccacatgg    600
174 ggggctcagt cagagagcca gccctttcgg ttgctctttg gttgagttgg ggggcagttc    660
176 tgggggctgt gacttgtgct gtcgcactac tgatccaaca gacagagctg caaagcctaa    720
178 ggcgggaggt gagccggctg cagcggagtg gagggccttc ccagaagcag ggagagcgcc    780
```

RAW SEQUENCE LISTING DATE: 10/29/2001
PATENT APPLICATION: US/09/854,864 TIME: 10:07:13

Input Set : A:\PTO.MH.txt
Output Set: N:\CRF3\10292001\I854864.raw

```
180 catggcagag cctctgggag cagagtcctg atgtcctgga agcctggaag gatggggcga    840
182 aatctcggag aaggagagca gtactcaccc agaagcacaa gaagaagcac tcagtcctgc    900
184 atcttgttcc agttaacatt acctccaagg actctgacgt gacagaggtg atgtggcaac    960
186 cagtacttag gcgtgggaga ggcctggagg cccagggaga cattgtacga gtctgggaca   1020
188 ctggaattta tctgctctat agtcaggtcc tgtttcatga tgtgactttc acaatgggtc   1080
190 aggtggtatc tcgggaagga caagggagaa gagaaactct attccgatgt atcagaagta   1140
192 tgccttctga tcctgaccgt gcctacaata gctgctacag tgcaggtgtc tttcatttac   1200
194 atcaagggga tattatcact gtcaaaattc cacgggcaaa cgcaaaactt agcctttctc   1260
196 cgcatggaac attcctgggg tttgtgaaac tatgattgtt ataaaggggg tggggatttc   1320
198 ccattccaaa aactggctag acaaaggaca aggaacggtc aagaacagct ctccatggct   1380
200 ttgccttgac tgttgttcct ccctttgcct ttcccgctcc cactatctgg gctttgactc   1440
202 catggatatt aaaaaagtag aatattttgt gtttatctcc caaaaa                  1486
205 <210> SEQ ID NO: 4
206 <211> LENGTH: 240
207 <212> TYPE: PRT
208 <213> ORGANISM: Mus musculus
210 <400> SEQUENCE: 4
212 Met Pro Ala Ser Ser Pro Gly His Met Gly Gly Ser Val Arg Glu Pro
213 1               5                  10                  15
216 Ala Leu Ser Val Ala Leu Trp Leu Ser Trp Gly Ala Val Leu Gly Ala
217             20                  25                  30
220 Val Thr Cys Ala Val Ala Leu Leu Ile Gln Gln Thr Glu Leu Gln Ser
221         35                  40                  45
224 Leu Arg Arg Glu Val Ser Arg Leu Gln Arg Ser Gly Gly Pro Ser Gln
225     50                  55                  60
228 Lys Gln Gly Glu Arg Pro Trp Gln Ser Leu Trp Glu Gln Ser Pro Asp
229 65                  70                  75                  80
232 Val Leu Glu Ala Trp Lys Asp Gly Ala Lys Ser Arg Arg Arg Arg Ala
233                 85                  90                  95
236 Val Leu Thr Gln Lys His Lys Lys Lys His Ser Val Leu His Leu Val
237             100                 105                 110
240 Pro Val Asn Ile Thr Ser Lys Asp Ser Asp Val Thr Glu Val Met Trp
241         115                 120                 125
244 Gln Pro Val Leu Arg Arg Gly Arg Gly Leu Glu Ala Gln Gly Asp Ile
245     130                 135                 140
248 Val Arg Val Trp Asp Thr Gly Ile Tyr Leu Leu Tyr Ser Gln Val Leu
249 145                 150                 155                 160
252 Phe His Asp Val Thr Phe Thr Met Gly Gln Val Val Ser Arg Glu Gly
253                 165                 170                 175
256 Gln Gly Arg Arg Glu Thr Leu Phe Arg Cys Ile Arg Ser Met Pro Ser
257             180                 185                 190
260 Asp Pro Asp Arg Ala Tyr Asn Ser Cys Tyr Ser Ala Gly Val Phe His
261         195                 200                 205
264 Leu His Gln Gly Asp Ile Ile Thr Val Lys Ile Pro Arg Ala Asn Ala
265     210                 215                 220
268 Lys Leu Ser Leu Ser Pro His Gly Thr Phe Leu Gly Phe Val Lys Leu
269 225                 230                 235                 240
272 <210> SEQ ID NO: 5
273 <211> LENGTH: 181
```

RAW SEQUENCE LISTING DATE: 10/29/2001
PATENT APPLICATION: US/09/854,864 TIME: 10:07:14

Input Set : A:\PTO.MH.txt
Output Set: N:\CRF3\10292001\I854864.raw

```
274 <212> TYPE: PRT
275 <213> ORGANISM: Homo sapiens
277 <400> SEQUENCE: 5
279 Met Ala Gly Gln Cys Ser Gln Asn Glu Tyr Phe Asp Ser Leu Leu His
280 1               5                  10                  15
283 Ala Cys Ile Pro Cys Gln Leu Arg Cys Ser Ser Asn Thr Pro Pro Leu
284             20                  25                  30
287 Thr Cys Gln Arg Tyr Cys Asn Ala Ser Val Thr Asn Ser Val Lys Gly
288         35                  40                  45
291 Thr Asn Ala Ile Leu Trp Thr Cys Leu Gly Leu Ser Leu Ile Ile Ser
292     50                  55                  60
295 Leu Ala Val Phe Val Leu Met Phe Leu Leu Arg Lys Ile Ser Ser Glu
296 65                  70                  75                  80
299 Pro Leu Lys Asp Glu Phe Lys Asn Thr Gly Ser Gly Leu Leu Gly Met
300                 85                  90                  95
303 Ala Asn Ile Asp Leu Glu Lys Ser Arg Thr Gly Asp Glu Ile Ile Leu
304             100                 105                 110
307 Pro Arg Gly Leu Glu Tyr Thr Val Glu Glu Cys Thr Cys Glu Asp Cys
308         115                 120                 125
311 Ile Lys Ser Lys Pro Lys Val Asp Ser Asp His Cys Phe Pro Leu Pro
312     130                 135                 140
315 Ala Met Glu Glu Gly Ala Thr Ile Leu Val Thr Thr Lys Thr Asn Asp
316 145                 150                 155                 160
319 Tyr Cys Lys Ser Leu Pro Ala Ala Leu Ser Ala Thr Glu Ile Glu Lys
320                 165                 170                 175
323 Ser Ile Ser Ala Arg
324             180
327 <210> SEQ ID NO: 6
328 <211> LENGTH: 51
329 <212> TYPE: PRT
330 <213> ORGANISM: Homo sapiens
332 <400> SEQUENCE: 6
334 Met Ala Gly Gln Cys Ser Gln Asn Glu Tyr Phe Asp Ser Leu Leu His
335 1               5                  10                  15
338 Ala Cys Ile Pro Cys Gln Leu Arg Cys Ser Ser Asn Thr Pro Pro Leu
339             20                  25                  30
342 Thr Cys Gln Arg Tyr Cys Asn Ala Ser Val Thr Asn Ser Val Lys Gly
343         35                  40                  45
346 Thr Asn Ala
347     50
350 <210> SEQ ID NO: 7
351 <211> LENGTH: 34
352 <212> TYPE: PRT
353 <213> ORGANISM: Homo sapiens
355 <400> SEQUENCE: 7
357 Cys Ser Gln Asn Glu Tyr Phe Asp Ser Leu Leu His Ala Cys Ile Pro
358 1               5                  10                  15
361 Cys Gln Leu Arg Cys Ser Ser Asn Thr Pro Pro Leu Thr Cys Gln Arg
362             20                  25                  30
```

```
365 Tyr Cys
369 <210> SEQ ID NO: 8
370 <211> LENGTH: 21
371 <212> TYPE: PRT
372 <213> ORGANISM: Homo sapiens
374 <400> SEQUENCE: 8
376 Ile Leu Trp Thr Cys Leu Gly Leu Ser Leu Ile Ile Ser Leu Ala Val
377 1               5                   10                  15
380 Phe Val Leu Met Phe
381             20
384 <210> SEQ ID NO: 9
385 <211> LENGTH: 283
386 <212> TYPE: PRT
387 <213> ORGANISM: Homo sapiens
389 <400> SEQUENCE: 9
391 Met Ala Gly Gln Cys Ser Gln Asn Glu Tyr Phe Asp Ser Leu Leu His
392 1               5                   10                  15
395 Ala Cys Ile Pro Cys Gln Leu Arg Cys Ser Ser Asn Thr Pro Pro Leu
396             20                  25                  30
399 Thr Cys Gln Arg Tyr Cys Asn Ala Ser Val Thr Asn Ser Val Lys Gly
400         35                  40                  45
403 Thr Asn Ala Gly Gly Gly Gly Gly Asp Lys Thr His Thr Cys Pro Pro
404     50                  55                  60
407 Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro
408 65                  70                  75                  80
411 Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
412                 85                  90                  95
415 Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn
416             100                 105                 110
419 Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
420         115                 120                 125
423 Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val
424     130                 135                 140
427 Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser
428 145                 150                 155                 160
431 Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
432                 165                 170                 175
435 Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp
436             180                 185                 190
439 Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
440         195                 200                 205
443 Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
444     210                 215                 220
447 Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
448 225                 230                 235                 240
451 Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
452                 245                 250                 255
455 Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
456             260                 265                 270
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/854,864

DATE: 10/29/2001
TIME: 10:07:15

Input Set : A:\PTO.MH.txt
Output Set: N:\CRF3\10292001\I854864.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1072 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22